REMARKS

The present Amendment amends claims 1, 2, 6, 7, 11, and 12, leaves claims 3-5 and 8-10 unchanged, and cancels claim 13. Therefore, the present application has pending claims 1-12.

Information Disclosure Statement

The Examiner indicated that the information disclosure statement filed on January 30, 2002 fails to comply with 37 CFR 1.98(a)(2). Specifically, the Examiner did not consider the non-English language reference in item 6 because a translation was not provided. Applicants submit that the non-English language reference does not contain information material to patentability, and therefore, should not be considered by the Examiner.

35 U.S.C. §101 Rejections

Claims 1-10 and 13 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. As indicated above, claim 13 was canceled. Therefore, this rejection with respect to claim 13 is rendered moot. This rejection with respect to the remaining claims 1-10 is traversed for the following reasons. Applicants submit that claims 1-10, as now more clearly recited, are directed to a program control method executed by a computer. Therefore, this rejection is overcome and should be withdrawn.

35 U.S.C. §102 Rejections

Claims 1, 2, 6, 7, and 11-13 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,738,975 to Yee, et al. ("Yee"). As indicated above,

claim 13 was canceled. Therefore, this rejection with respect to claim 13 is rendered moot. This rejection with respect to the remaining claims 1, 2, 6, 7, 11, and 12 is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 1, 2, 6, 7, 11, and 12, are not taught or suggested by Yee whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe the features of the present invention. Specifically, amendments were made to the claims to more clearly describe that the present invention is directed to a program control method, a computer system, and a computer readable recording medium storing a control program as recited, for example, in independent claims 1, 2, 6, 7, 11, and 12.

Claim 1

The present invention, as recited in claim 1, includes a program control method executed by a computer. The program control method converts data from a first program into a format available for a second program. The method includes a step of receiving, by an adapter execution unit, data outputted from particular transaction processing of the first program. The adapter execution unit responds to an execution request from the first program. The method also includes a step of referencing adapter call definition information for calling an adapter component for use with a plurality of transactions. The adapter component is adapted to connect the second program and can be executed to control the second program in the

computer. Another step of the method includes acquiring, by the adapter execution unit, an adapter component reference name that indicates adapter component reference information corresponding to the particular transaction and transaction identification information. The transaction identification information indicates identification information of the second program. The method also includes a step of converting, by the adapter execution unit, the data into a data format for a predetermined interface defined by the adapter component to generate first converted data. Another step includes initiating an adapter component corresponding to the adapter component reference name. Yet another step includes outputting the transaction identification information and the first converted data from the adapter execution unit to the adapter component. The method also includes receiving the transaction identification information output from the adapter execution unit and the first converted data as inputs to the adapter component. Also included in the method is a step of referencing connector call definition information for calling the second program based on the transaction identification information, and a step of acquiring, by the adapter component, a connector component reference name. The connector component reference name indicates reference information of the second program and a method name corresponding to the particular transaction processing. The method also includes a step of converting, by the adapter component, the first converted data format for a predetermined interface defined by the second program to generate second converted data. Also included in the method are a step of initiating the method of the second program, corresponding to the connector

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component reference name, and a step of outputting the second converted data from the adapter component to the second program. In the program control method of the present invention, the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. In addition, the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. The prior art does not disclose all these features.

Yee discloses a system for integrating a plurality of computer applications. However, Yee does not teach or suggest a program control method, as recited in claim 1.

Yee's system provides a modular application collaborator for providing inter-operability between applications including a plurality of connectors for communicating with a plurality of applications and an interchange server. The interchange server includes an application collaboration module and service module. The service module transfers messages between connectors and the application collaboration module. The application collaboration defines the inter-operability between two or more applications the interchange server service module includes a transaction service and an error service. Transactions are executed in the application collaboration module and the transaction service records each action and a compensating action for undoing an associated action. An error service monitors for errors in the interchange server. Upon detection of an error, the error service stops the execution of a transaction and initiates the execution of any required

compensating actions to undo the interrupted transactions. The compensating transactions may be executed at the connectors and are not required to be overseen by the interchange server.

In the present invention, the program control method includes a step of receiving data output from particular transaction processing of the first program. An adapter execution unit receives the output data and responds to an execution request from the first program. Yee does not disclose this feature. As described in column 18, lines 5-8 and column 20, lines 12-20, Yee discloses the use of source adapters. The source adapters extract data from enterprise applications and produce messages that they send to other integration objects. Specifically, a source adapter: polls for or is notified by its application of a particular type of event that has occurred at the application; extracts the data relating to the event from the application; using message definition instructions, constructs a system message from the data; and propagates the data to the target application. This is quite different from an adapter execution unit, as claimed, that responds to an execution request from a first program.

Another feature of the present invention includes a step of acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to the particular transaction. The adapter execution unit also acquires transaction identification information for indicating identification information of the second program. Yee does not disclose these features. To support the assertion that Yee discloses an adapter component

reference name and transaction identification information, the Examiner cites column 20, lines 11-20 and column 18, line 62 to column 19, line 9. However, the cited text does not disclose an adapter component reference name that indicates adapter component reference information corresponding to the particular transaction, and transaction identification information that indicates identification information of the second program, as claimed. Therefore, the Yee does not disclose the claimed features.

Yet another feature of the present invention includes a step of acquiring, by the adapter component, a connector component reference name for indicating reference information of the second program, and acquiring a method name corresponding to the particular transaction processing with reference to connector call definition for calling the second program. Yee does not disclose this feature. To support the assertion that Yee teaches a connector component reference name, the Examiner refers to the use of "the data of the message definitions to determine how to process the message" (page 4, lines 12-13 of the Office Action). However, the feature referred to by the Examiner is not the same as a connector component reference name that indicates reference information of the second program, and therefore, Yee does not disclose this feature. Furthermore, Yee does not disclose acquiring a method name corresponding to the particular transaction processing with reference to connector call definition for calling the second program, as claimed.

A feature of the present invention also includes where the first program designates execution of a plurality of transactions and has a metadata definition for

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defining transactions and a data format of each transaction. Yee does not disclose this feature. The Examiner asserts that the enterprise applications correspond to the first program of the present invention. However, Yee does not disclose where the enterprise applications designate execution of a plurality of transactions and have a metadata definition that defines transactions and a data format of each transaction, as claimed. Therefore, Yee does not disclose the claimed feature.

Another feature of the present invention includes where the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. Yee does not disclose this feature. In the Office Action, the Examiner asserts that a target application corresponds to the second program of the present invention. However, Yee's target application does not have a metadata definition that defines a method of an existing transaction and a data format of the method for using the existing transaction, as claimed. Therefore, Yee does not disclose the claimed feature.

Therefore, Yee fails to teach or suggest "receiving data outputted from particular transaction processing of the first program by an adapter execution unit being executable in the computer for responding to an execution request from the first program" as recited in claim 1.

Furthermore, Yee fails to teach or suggest "acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to said particular transaction and

transaction identification information for indicating identification information of the second program" as recited in claim 1.

Even further, Yee fails to teach or suggest "acquiring, by the adapter component, a connector component reference name for indicating reference information of the second program and a method name corresponding to said particular transaction processing" as recited in claim 1.

Yet even further, Yee fails to teach or suggest "wherein said first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction, as recited in claim 1.

Still, even further, Yee fails to teach or suggest "wherein said second program has a metadata definition for defining a method of an existing transaction and a data format of the method for employing the existing transaction" as recited in claim 1.

Claim 2

The present invention, as recited in claim 2, includes a program control method executed by a computer. The program control method converts data output from a first program into a format available for a second program. The method includes a step of receiving, by an adapter execution unit, data output from particular transaction processing of the first program. The adapter execution unit responds to an execution request from the first program. Another step of the method includes referencing adapter call definition information for calling an adapter component for use in a particular transaction, the adapter component being adapted to connect the second program and being executable for controlling the second program in the

computer. The method also includes a step of acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to the particular transaction processing. Yet another step includes converting, by the adapter execution unit, the data into a data format for a predetermined interface defined by the adapter component to generate first converted data. The method also initiates an adapter component corresponding to the adapter component reference name and outputs the first converted data from the adapter execution unit to the adapter component. In addition, the method receives the first converted data output from the adapter execution unit to the adapter component and references connector call definition information for calling the second program. The method also acquires, by the adapter component, a connector component reference name. The reference name indicates reference information of the second program and a method name corresponding to the particular transaction processing. Also included in the method is a step of converting, by the adapter component, the first converted data into a data format for a predetermined interface defined by the second program to generate second converted data. The method also includes initiating the method of the second program corresponding to the connector component reference name, and a step of outputting the second converted data from the adapter component to the second program. In the program control method of the present invention, the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. In addition, the second

program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. The prior art does not disclose all these features.

As previously discussed, Yee discloses a system for integrating a plurality of computer applications. However, Yee does not teach or suggest a program control method, as recited in claim 2.

The present invention provides a program control method that includes a step of receiving data output from particular transaction processing of the first program. An adapter execution unit receives the output data and responds to an execution request from the first program. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes a step of acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to the particular transaction processing. As previously discussed regarding claim 1, Yee does not disclose this feature.

Yet another feature of the present invention includes a step of acquiring, by the adapter component, a connector component reference name for indicating reference information of the second program, and acquiring a method name corresponding to the particular transaction processing. As previously discussed regarding claim 1, Yee does not disclose this feature.

A feature of the present invention also includes where the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes where the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Therefore, Yee fails to teach or suggest "receiving data outputted from particular transaction processing of the first program by an adapter execution unit being executable in the computer for responding to an execution request from said first program" as recited in claim 2.

Furthermore, Yee fails to teach or suggest "acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to said particular transaction processing" as recited in claim 2.

Even further, Yee fails to teach or suggest "acquiring, by the adapter component, a connector component reference name for indicating reference information of the second program and a method name corresponding to said particular transaction processing" as recited in claim 2.

Yet even further, Yee fails to teach or suggest "wherein said first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction, as recited in claim 2.

Still, even further, Yee fails to teach or suggest "wherein said second program has a metadata definition for defining a method of an existing transaction and a data format of the method for employing the existing transaction" as recited in claim 2.

Claims 6, 11, and 12

The present invention, as recited in claim 6, and as similarly recited in claims 11 and 12, includes a program control method, a computer system, and a computer readable recording medium storing a control program. The program control method is executed by a computer and converts data output from a first program into a format available for a second program. The method includes a step of receiving data output from particular transaction processing of the first program by an adapter execution unit. The adapter execution unit responds to an execution request from the first program. The method also includes acquiring, by the adapter execution unit, an adapter component reference name that indicates adapter component reference information corresponding to the particular transaction with reference to adapter call definition information for calling an adapter component for use with a plurality of transactions. The adapter component is adapted to connect the second program and can be executed to control the second program in the computer. The method also includes acquiring, by the adapter execution unit, transaction identification information for indicating identification information of the second program with

reference to the adapter call definition information. Also included in the method are a step of converting, by the adapter execution unit, the data into a format that matches an interface for the adapter component, to generate first converted data, and a step of passing the transaction identification information and the first converted data to the adapter component. Another step includes selecting, by the adapter component, connector call definition information for calling the second program, based on the transaction identification information. Yet another step includes acquiring, by the adapter component, a connector reference name that indicates reference information of the second program and a method name corresponding to the particular transaction processing with reference to the connector call definition information. The method also includes converting, by the adapter component, the first converted data into a format that matches an interface for the second program, to generate second converted data, and passing the second converted data to the second program corresponding to the connector reference name. In the program control method of the present invention, the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. In addition, the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. The prior art does not disclose all these features.

As previously discussed, Yee discloses a system for integrating a plurality of computer applications. However, Yee does not teach or suggest a program control

method, a computer system, and a computer readable recording medium storing a control program, as recited in claim 6, and as similarly recited in claims 11 and 12.

The present invention provides a program control method that includes a step of receiving data output from particular transaction processing of the first program. An adapter execution unit receives the output data and responds to an execution request from the first program. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes a step of acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to the particular transaction processing, with reference to adapter call definition information for calling an adapter component for use with a plurality of transactions. As previously discussed regarding claim 1, Yee does not disclose this feature.

The present invention also discloses acquiring, by the adapter execution unit, transaction identification information for indicating identification information of the second program with reference to the adapter call definition information. As previously discussed regarding claim 1, Yee does not disclose this feature.

Yet another feature of the present invention includes a step of acquiring, by the adapter component, a connector reference name for indicating reference information of the second program, and acquiring a method name corresponding to the particular transaction processing, with reference to the connector call definition

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information. As previously discussed regarding claim 1, Yee does not disclose this feature.

A feature of the present invention also includes where the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes where the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Therefore, Yee fails to teach or suggest "receiving data outputted from particular transaction processing of said first program by an adapter execution unit being executable in the computer for responding to an execution request from said first program" as recited in claim 6, and as similarly recited in claims 11 and 12.

Furthermore, Yee fails to teach or suggest "acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to said particular transaction with reference to adapter call definition information for calling an adapter component for use in common with a plurality of transactions, said adapter component being adapted to connect the second program and being executable for controlling the second program in the computer" as recited in claim 6, and as similarly recited in claims 11 and 12.

Even further, Yee fails to teach or suggest "<u>acquiring, by the adapter</u> <u>execution unit, transaction identification information for indicating identification</u> <u>information of the second program with reference to said adapter call definition</u> <u>information</u>" as recited in claim 6, and as similarly recited in claims 11 and 12.

Yet even further, Yee fails to teach or suggest "<u>acquiring, by said adapter</u> <u>component, a connector reference name for indicating reference information of the</u> <u>second program and a method name corresponding to said particular transaction</u> <u>processing with reference to said connector call definition information</u>" as recited in claim 6, and as similarly recited in claims 11 and 12.

Yet even further, Yee fails to teach or suggest "<u>wherein said first program</u> <u>designates execution of a plurality of transactions and has a metadata definition for</u> <u>defining transactions and a data format of each transaction</u>, as recited in claim 6, and as similarly recited in claims 11 and 12.

Still, even further, Yee fails to teach or suggest "<u>wherein said second program</u> <u>has a metadata definition for defining a method of an existing transaction and a data</u> <u>format of the method for employing the existing transaction</u>" as recited in claim 6, and as similarly recited in claims 11 and 12.

Claim 7

The present invention, as recited in claim 7, includes a program control method executed by a computer for converting data output from a first program into a format available for a second program. The method includes a step of receiving an initiation request from the first program to an adapter execution unit executable in the

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computer for responding to an execution request from the first program. The initiation request includes data. The method also includes acquiring, by the adapter execution unit, an adapter component reference name that indicates adapter component reference information corresponding to particular transaction processing with reference to adapter call definition information for calling an adapter component for use in a particular transaction in the adapter execution unit. The particular transaction is initiated based on the initiation request, and the adapter component is adapted to connect the second program and can control the second program in the computer. The method also includes a step of converting, by the adapter execution unit, the data into a format that matches an interface for the adapter component, to generate first converted data, and a step of passing the first converted data to the adapter component. Another step includes acquiring, by the adapter component, a connector component reference name that indicates reference information of the second program and a method name corresponding to the particular transaction processing with reference to connector call definition information for calling the second program. The method also includes a step of converting, by the adapter component, the first converted data into a format that matches an interface for the second program, to generate second converted data, and a step of passing the second converted data to the second program corresponding to the connector reference name. In the program control method of the present invention, the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. In addition,

the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. The prior art does not disclose all these features.

As previously discussed, Yee discloses a system for integrating a plurality of computer applications. However, Yee does not teach or suggest a program control method, as recited in claim 7.

The present invention provides a program control method that includes a step of receiving an initiation request from the first program to an adapter execution that responds to an execution request from the first program. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes a step of acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to the particular transaction processing, with reference to adapter call definition information for calling an adapter component for use in a particular transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Yet another feature of the present invention includes a step of acquiring, by the adapter component, a connector component reference name for indicating reference information of the second program, and acquiring a method name corresponding to the particular transaction processing, with reference to connector call definition information for calling the second program. As previously discussed regarding claim 1, Yee does not disclose this feature.

A feature of the present invention also includes where the first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Another feature of the present invention includes where the second program has a metadata definition for defining a method of an existing transaction and a data format of the method for using the existing transaction. As previously discussed regarding claim 1, Yee does not disclose this feature.

Therefore, Yee fails to teach or suggest "<u>receiving an initiation request from said first program by an adapter execution unit being executable in the computer for responding to an execution request from said first program, said initiation request including data</u>" as recited in claim 7.

Furthermore, Yee fails to teach or suggest "<u>acquiring, by the adapter execution unit, an adapter component reference name for indicating adapter component reference information corresponding to particular transaction processing with reference to adapter call definition information for calling an adapter component for use in a particular transaction in the adapter execution unit initiated based on said initiation request, said adapter component being adapted to connect the second program and being executable for controlling the second program in the computer</u>" as recited in claim 7.

Even further, Yee fails to teach or suggest "<u>acquiring, by the adapter component, a connector component reference name for indicating reference</u>

information of the second program and a method name corresponding to said particular transaction processing with reference to connector call definition information for calling said second program" as recited in claim 7.

Yet even further, Yee fails to teach or suggest "wherein said first program designates execution of a plurality of transactions and has a metadata definition for defining transactions and a data format of each transaction, as recited in claim 7.

Still, even further, Yee fails to teach or suggest "wherein said second program has a metadata definition for defining a method of an existing transaction and a data format of the method for employing the existing transaction" as recited in claim 7.

Therefore, Yee fails to teach or suggest the features of the present invention, as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of claims 1, 2, 6, 7, 11, and 12 are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1, 2, 6, 7, 11, and 12.

35 U.S.C. §103 Rejections

Claims 3-5 and 8-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yee. Claims 3-5 are dependent on claim 1 and claims 8-10 are dependent on claim 6. Therefore, Applicants submit that claims 3-5 and 8-10 are patentable for at least the same reasons as the independent claims.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-12 are in condition for allowance. Accordingly, early allowance of claims 1-12 is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. 500.41130X00).

Respectfully submitted,

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